

***Remarks***

Reconsideration of this Application is respectfully requested. The instant Amendment and Reply is essentially identical to the Amendment and Reply under 37 C.F.R. § 1.116 filed by Applicants on November 12, 2004, in reply to the final Office Action, except that the listing of claims previously submitted now complies with 37 C.F.R. 1.121(c) (particularly, claims 1, 6, 9, 32 and 35 as mentioned by the Examiner in the Continuation Sheet attached to the final Office Action).

Upon entry of the foregoing amendment, claims 1-5, 7, 8, 10-31, 33, 34, 36-64 are pending in the application, with claims 1, 51, 52 and 53 being independent. Contrary to the final Office Action, claim 6 is no longer pending in the application, as it was cancelled in Applicant's Reply and Amendment dated December 29, 2003. Claims 9 and 35 are sought to be cancelled without prejudice to or disclaimer of the subject matter therein. Claims 1 and 39 are sought to be amended by this paper, while new claims 53-64 have been added. Claims 11-28, 51 and 52 have been withdrawn from consideration. Applicants submit that the amendments to claims 1 and 39, as well as the newly presented claims, introduce no new matter into the application, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

***Priority Under 35 U.S.C. § 119***

Applicants note that the Examiner has made an acknowledgment of **all** claims for foreign priority under 35 U.S.C. § 119 and that copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

***Elections/Restrictions***

Although not in agreement, Applicants acknowledge that the Examiner has taken the position that claims 51 and 52 are directed to an invention that is independent or distinct from the prior election made by Applicants, and that claims 51 and 52 have been withdrawn from consideration as being directed to a non-elected invention.

***Rejections under 35 U.S.C. § 112***

The Examiner has rejected claim 35 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention. More particularly, the Examiner has stated that the recitation that the seat of claim 35 faces "aft" is not understood. By this paper, Applicant seeks to cancel claim 35 without prejudice to, or disclaimer of, the subject matter therein. With this cancellation, Applicants submit that the rejection under Section 112 is moot and should be withdrawn.

***Rejections under 35 U.S.C. § 103***

The Examiner has rejected claims 1, 3-7, 9-10 and 34-38 as being anticipated by the disclosure of European Patent Publication No. EP 0 036 822 A1 to LeGrand (the

"LeGrand publication") in view of U.S. Patent No. 3,074,759 to Bergenwall (the "Bergenwall patent"). Although the rejection under Section 103 encompasses both independent and dependent claims, Applicants' remarks will focus on independent claim 1 only, since to the extent that independent claim 1 is shown to be patentable, so too are the rejected dependent claims by virtue of their dependency.

The Examiner has taken the position that (1) the LeGrand publication reveals all of the claimed elements with the exception of a back portion and seating portion moveable to a fully reclined position in which the seating portion and back portion form a flat surface and (2) the Bergenwall patent teaches the use of a seat with a back (5) and a seat (10) that are moveable to a fully reclined flat position as disclosed in Figure 8 thereof. According to the Examiner, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the seat reclining mechanism (103)(104)(105)(106)(107) disclosed by the LeGrand publication to allow for positioning of the seating unit to a fully flat position to improve the comfort of the seat occupant by providing a "couch" position. *See* page 5, paragraph 3 of the final Office Action. Applicants respectfully disagree with the Examiner's combination under Section 103 for the following reasons.

Independent claim 1 as amended herein recites an *aircraft* seating unit comprising a pair of seats facing in opposite directions with each seat comprising a seating space for receiving the seated body of an occupant and an extension space for the legs of the occupant. The seats are positioned along each side of a longitudinal axis with the seating space of one seat extending over the longitudinal axis at the extension space of the other seat. Either one of the seats has a seat axis substantially parallel to the

longitudinal axis. Each seat has a back portion and a seating portion. The seating portion is movable with the back portion to allow the back portion to move between an upright position and a *fully* reclined position in which the seating portion and the back portion form a flat surface.

First, as the Examiner knows, an obviousness rejection under Section 103 cannot be based on a combination of references, unless there is something in the teachings thereof that would provide one of ordinary skill in the art with the incentive or motivation to make the combination. In addition, it is impermissible to combine references under Section 103 where the combination destroys the primary reference or makes it inoperable or where the references teach away from each other. *See In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984). Applicants submit that one of ordinary skill in the *aircraft seating* art would not be motivated to combine the teachings of the LeGrand publication directed to high-density, tiered berths *for use in a train or railway carriage* with the *crude and structurally sparse reclining chair* of the Bergenwall patent. Regulatory standards for the seats of aircrafts are both numerous and complex to ensure passenger safety. To combine the teachings of the LeGrand publication (for use in a train) with those of the Bergenwall patent (for a simple chair) would conflict with such regulations and simply confound one of ordinary skill in the art. For example, aircraft manufacturers are required to provide tracks along the aircraft cabin floor to which all seats must be attached. Aircraft seats are designed by artisans in the aircraft seating art to fit within these tracks, while simultaneously meeting other safety requirements and comfort/privacy considerations. Neither an aircraft manufacturer, nor an aircraft seat designer, would be motivated to consider the teachings

of either the LeGrand publication or the Bergenwall patent, as the structure of neither meets the relevant requirements for aircraft seats and any modifications thereto would give rise to undesirable cost and regulatory compliance issues. Pages from the Internet directed to the standards and regulations associated with aircraft seating, in support of Applicants' arguments, are attached hereto for the Examiner's consideration, as Exhibit A.

Moreover, there is nothing in the disclosure of either reference that would motivate one of ordinary skill in the art to combine the structure of the LeGrand publication with that of the Bergenwall patent. The LeGrand publication is concerned with providing a multiplicity of elongate seats having a reclined or couched profile in a compartment of a railway carriage. The LeGrand publication is particularly concerned with providing the maximum number of seats in a compartment and achieves this by arranging the couches in tiers or levels. The LeGrand publication puts particular emphasis on the construction of the couches being such as to reduce the thickness from 5 cm to 3 cm, the cumulative effect of which is to allow the creation of a fifth level. *See* page 4, lines 15 to 32 of the translation provided by Applicants and attached hereto for the Examiner's ease of reference, as Exhibit B. It is thus a critical part of the teaching of the LeGrand publication that the vertical space occupied by each couch is minimized. A savings of just 20 cm provides this advantage. Applicants submit that this advantage would be entirely lost if the couches of the LeGrand publication were made movable to an upright position, by combination with the teachings of the Bergenwall patent as suggested by the Examiner. Such movement would entirely negate the 2 cm per couch savings and would likely result in the removal of a least one tier or level, so that there

would be no more than three tiers or levels. Thus, having a couch capable of moving to an upright position would be entirely contrary to the teachings of the LeGrand publication.

As shown in Figures 3, 11 and 12 of the LeGrand publication, the couches are supported at their ends in the manner of a hammock. Applicants submit that this structure simply cannot provide the upright position recited in claim 1. Furthermore, it is not clear how the couch arrangement could be modified to provide an upright position, leaving aside that this would be completely contrary to the disclosure of the LeGrand publication, as explained *supra*.

Furthermore, in the final Office Action, the Examiner has argued that the phantom line depiction shown in Figure 11 is an upright position, while the solid line depiction is considered a take-off angle/position. Applicants submit that the Examiner is taking liberties with language and has distorted the teachings of the LeGrand publication to make the prior art read onto the limitations of claim 1, using nothing more than impermissible hindsight reconstruction. A mere glance at Figure 11 reveals that, at the phantom line, an occupant's head would be in alignment with the feet and cannot possibly be considered the claimed "upright" position. Indeed, the position is described as a "reclining profile" in the translation of the publication. *See* Exhibit B, page 7, line 33 of the English translation. As to the solid-line position being a take-off position, Applicants argue that, as required by the National Transportation Safety Board, the back of an aircraft must be moved forward and into a fully upright position during take-off, and that the solid-line depiction of the berth of the LeGrand publication clearly does not disclose or suggest such a seat arrangement or configuration.

As to the propriety of the combination, the Examiner has put forth that the LeGrand publication teaches all of the limitations of claim 1 except for a seat that fully reclines to provide a flat surface. The Examiner alleges that this element is taught by the Bergenwall patent, and that it would have been obvious to combine the disclosure of the LeGrand publication with the Bergenwall patent to arrive at the invention of claim 1. As explained above and further here, it would not be obvious to one skilled in the art to modify the couch of the LeGrand publication to provide an upright seating position. The LeGrand publication teaches a complex structure of couches that are arranged to provide maximum packing and to allow ease of manufacture. *See* Exhibit B, page 2, lines 7 to 15 of the English translation. The Bergenwall patent teaches a crude reclining chair having no structural commonality with the couch of the LeGrand publication. There is no way that the structure taught by the Bergenwall patent would be suitable for the tiered, berth arrangement of the LeGrand publication. Indeed, the range of movement of the seat back shown in Figures 7 and 8 of the Bergenwall patent could not be accomplished with the structure taught by the LeGrand publication, as to do so would require more vertical room/height, resulting in the need to remove at least one tier, thereby sacrificing an object and advantage of the LeGrand invention. Still further, the arrangement of the Bergenwall patent comprises two separate and distinct parts. It is impossible to reconcile this structure with the carefully arranged tier structure of the LeGrand publication. In order to adopt the reclining back movement taught by the Bergenwall patent, it would be necessary to detach one end of the couch of the LeGrand publication from its mounting (see the comment above about a hammock-like mounting). Thus, the couch would be supported at one end only. Such a modification would simply not be envisaged by the

skilled person of art. Simply put, there is nothing in the teaching of the Bergenwall patent or the LeGrand publication that would provide the motivation or incentive to modify the structure taught by the LeGrand publication in order to arrive at the invention of claim 1, as suggested by the Examiner. On the contrary, in considering any modification to the structure of the LeGrand publication, the skilled artisan would simply dismiss the teachings of the Bergenwall patent as not being relevant.

Finally, even if one of ordinary skill in the art would have been motivated to combine the teachings of the LeGrand publication with those of the Bergenwall patent (and Applicants maintain that it is not), Applicants again submit that the combination does not teach the invention of claim 1. As noted *supra*, claim 1 recites that either of the seats has a seat axis *substantially parallel* to the longitudinal axis of the seating unit. In the final Office Action, the Examiner maintains that the seat axes of seats 3,4 of the LeGrand publication are substantially parallel to the longitudinal axis 18 thereof. On page 8 of the final Office Action, the Examiner does acknowledge that a "small angle is made between the seat axis and the longitudinal axis, however, this angle is so small, the lines are still considered to be "substantially" parallel." Applicants submit that the angle to which the Examiner refers is not "small". Indeed, the translation of the LeGrand publication indicates that angle **a** and **a'** is on the order of 20 and 16 degrees, respectively. These angles are not small and cannot result in the seat axes and longitudinal axes being considered "substantially parallel", as claimed by Applicants. The terms substantially parallel are intended to cover minor variations from the exact, not the angle degree disclosed in the LeGrand publication. In the absence of a teaching or suggestion for all limitations of claim 1, Applicants submit that the claim is patentable



over the art of record. Reconsideration and withdrawal of the rejection is believed proper and is therefore respectfully requested.

***Other Matters***

The Examiner has indicated that claims 39-50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. By this paper, Applicants have rewritten the subject matter of claims 39-50 as new claims 53-64. Entry and allowance of new claims 53-64 is believed to be proper and is earnestly solicited.

***Conclusion***

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and withdraw the same. Applicants believe that a full and complete reply has been made to the outstanding final Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully  
requested.

Respectfully submitted,

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